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#
# set
Current settings:
gyro_hardware_lpf = NORMAL
gyro_lpf1_type = PT1
gyro_lpf1_static_hz = 250
gyro_lpf2_type = PT1
gyro_lpf2_static_hz = 500
gyro_notch1_hz = 0
gyro_notch1_cutoff = 0
gyro_notch2_hz = 0
gyro_notch2_cutoff = 0
gyro_calib_duration = 125
gyro_calib_noise_limit = 48
gyro_offset_yaw = 0
gyro_overflow_detect = ALL
yaw_spin_recovery = AUTO
yaw_spin_threshold = 1950
gyro_to_use = FIRST
dyn_notch_count = 1
dyn_notch_q = 500
dyn_notch_min_hz = 100
dyn_notch_max_hz = 600
gyro_lpf1_dyn_min_hz = 250
gyro_lpf1_dyn_max_hz = 500
gyro_lpf1_dyn_expo = 5
gyro_filter_debug_axis = ROLL
acc_hardware = AUTO
acc_lpf_hz = 25
acc_trim_pitch = 0
acc_trim_roll = 0
acc_calibration = 35,21,-31,1
align_mag = DEFAULT
mag_align_roll = 0
mag_align_pitch = 0
mag_align_yaw = 0
mag_bustype = I2C
mag_i2c_device = 1
mag_i2c_address = 0
mag_spi_device = 0
mag_hardware = AUTO
mag_calibration = 0,0,0
baro_bustype = I2C
baro_spi_device = 0
baro_i2c_device = 1
baro_i2c_address = 0
baro_hardware = AUTO
mid_rc = 1500
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min_check = 1050
max_check = 1900
rssi_channel = 0
rssi_src_frame_errors = OFF
rssi_scale = 100
rssi_offset = 0
rssi_invert = OFF
rssi_src_frame_lpf_period = 30
rssi_smoothing = 125
rc_smoothing = ON
rc_smoothing_auto_factor = 30
rc_smoothing_auto_factor_throttle = 30
rc_smoothing_setpoint_cutoff = 0
rc_smoothing_feedforward_cutoff = 0
rc_smoothing_throttle_cutoff = 0
rc_smoothing_debug_axis = ROLL
fpv_mix_degrees = 0
max_aux_channels = 14
serialrx_provider = CRSF
serialrx_inverted = OFF
crsf_use_negotiated_baud = OFF
airmode_start_throttle_percent = 25
rx_min_usec = 885
rx_max_usec = 2115
serialrx_halfduplex = OFF
mcp_override_channels_mask = 0
mcp_override_failsafe = OFF
adc_device = 1
adc_vrefint_calibration = 0
adc_tempsensor_calibration30 = 0
adc_tempsensor_calibration110 = 0
blackbox_sample_rate = 1/4
blackbox_device = SPIFLASH
blackbox_disable_pids = OFF
blackbox_disable_rc = OFF
blackbox_disable_setpoint = OFF
blackbox_disable_bat = OFF
blackbox_disable_mag = OFF
blackbox_disable_alt = OFF
blackbox_disable_rssi = OFF
blackbox_disable_gyro = OFF
blackbox_disable_gyrounfilt = OFF
blackbox_disable_acc = OFF
blackbox_disable_debug = OFF
blackbox_disable_motors = OFF
blackbox_disable_rpm = OFF
blackbox_disable_gps = OFF
blackbox_mode = NORMAL

blackbox_high_resolution = OFF
min_throttle = 1070
max_throttle = 2000
min_command = 1000
motor_kv = 1960
dshot_idle_value = 550
dshot_burst = OFF
dshot_bidir = ON
dshot_edt = OFF
dshot_bitbang = AUTO
dshot_bitbang_timer = AUTO
use_unsynced_pwm = OFF
motor_pwm_protocol = DSHOT300
motor_pwm_rate = 480
motor_pwm_inversion = OFF
motor_poles = 14
motor_output_reordering = 0,1,2,3,4,5,6,7
thr_corr_value = 0
thr_corr_angle = 800
failsafe_delay = 15
failsafe_off_delay = 10
failsafe_throttle = 1000
failsafe_switch_mode = STAGE1
failsafe_throttle_low_delay = 100
failsafe_procedure = DROP
failsafe_recovery_delay = 5
failsafe_stick_threshold = 30
align_board_roll = 0
align_board_pitch = 0
align_board_yaw = 0
bat_capacity = 0
vbat_max_cell_voltage = 430
vbat_full_cell_voltage = 410
vbat_min_cell_voltage = 330
vbat_warning_cell_voltage = 350
vbat_hysteresis = 1
current_meter = ADC
battery_meter = ADC
vbat_detect_cell_voltage = 300
use_vbat_alerts = ON
use_cbat_alerts = OFF
cbat_alert_percent = 10
vbat_cutoff_percent = 100
force_battery_cell_count = 0
vbat_display_lpf_period = 30
vbat_sag_lpf_period = 2
ibat_lpf_period = 10
vbat_duration_for_warning = 0

vbat_duration_for_critical = 0
vbat_scale = 110
vbat_divider = 10
vbat_multiplier = 1
ibata_scale = 170
ibata_offset = 0
ibatv_scale = 0
ibatv_offset = 0
beeper_inversion = ON
beeper_od = OFF
beeper_frequency = 0
beeper_dshot_beacon_tone = 1
yaw_motors_reversed = OFF
mixer_type = LEGACY
crashflip_motor_percent = 0
crashflip_expo = 35
3d_deadband_low = 1406
3d_deadband_high = 1514
3d_neutral = 1460
3d_deadband_throttle = 50
3d_limit_low = 1000
3d_limit_high = 2000
3d_switched_mode = OFF
rateprofile_name = -
thr_mid = 50
thr_expo = 0
rates_type = ACTUAL
quickrates_rc_expo = OFF
roll_rc_rate = 7
pitch_rc_rate = 7
yaw_rc_rate = 7
roll_expo = 0
pitch_expo = 0
yaw_expo = 0
roll_srate = 67
pitch_srate = 67
yaw_srate = 67
throttle_limit_type = OFF
throttle_limit_percent = 100
roll_rate_limit = 1998
pitch_rate_limit = 1998
yaw_rate_limit = 1998
reboot_character = 82
serial_update_rate_hz = 100
imu_dcm_kp = 2500
imu_dcm_ki = 0
small_angle = 25
imu_process_denom = 2

mag_declination = 0
auto_disarm_delay = 5
gyro_cal_on_first_arm = OFF
gps_provider = UBLOX
gps_sbas_mode = NONE
gps_auto_config = ON
gps_auto_baud = OFF
gps_ublox_acquire_model = STATIONARY
gps_ublox_flight_model = AIRBORNE_4G
gps_update_rate_hz = 10
gps_ublox_utc_standard = AUTO
gps_ublox_use_galileo = OFF
gps_set_home_point_once = OFF
gps_use_3d_speed = OFF
gps_sbas_integrity = OFF
gps_nmea_custom_commands = -
gps_rescue_min_start_dist = 15
gps_rescue_alt_mode = MAX_ALT
gps_rescue_initial_climb = 10
gps_rescue_ascend_rate = 750
gps_rescue_return_alt = 30
gps_rescue_ground_speed = 750
gps_rescue_max_angle = 45
gps_rescue_roll_mix = 150
gps_rescue_pitch_cutoff = 75
gps_rescue_imu_yaw_gain = 10
gps_rescue_descent_dist = 20
gps_rescue_descend_rate = 150
gps_rescue_landing_alt = 4
gps_rescue_disarm_threshold = 20
gps_rescue_throttle_min = 1100
gps_rescue_throttle_max = 1700
gps_rescue_throttle_hover = 1275
gps_rescue_sanity_checks = RESCUE_SANITY_FS_ONLY
gps_rescue_min_sats = 8
gps_rescue_allow_arwing_without_fix = OFF
gps_rescue_throttle_p = 15
gps_rescue_throttle_i = 15
gps_rescue_throttle_d = 20
gps_rescue_velocity_p = 8
gps_rescue_velocity_i = 40
gps_rescue_velocity_d = 12
gps_rescue_yaw_p = 20
gps_rescue_use_mag = ON
deadband = 0
yaw_deadband = 0
yaw_control_reversed = OFF
pid_process_denom = 2

runaway_takeoff_prevention = ON
runaway_takeoff_deactivate_delay = 500
runaway_takeoff_deactivate_throttle_percent = 20
profile_name = -
dterm_lpf1_dyn_min_hz = 75
dterm_lpf1_dyn_max_hz = 150
dterm_lpf1_dyn_expo = 5
dterm_lpf1_type = PT1
dterm_lpf1_static_hz = 75
dterm_lpf2_type = PT1
dterm_lpf2_static_hz = 150
dterm_notch_hz = 0
dterm_notch_cutoff = 0
vbat_sag_compensation = 0
pid_at_min_throttle = ON
anti_gravity_gain = 80
anti_gravity_cutoff_hz = 5
anti_gravity_p_gain = 100
acc_limit_yaw = 0
acc_limit = 0
crash_dthreshold = 50
crash_gthreshold = 400
crash_setpoint_threshold = 350
crash_time = 500
crash_delay = 0
crash_recovery_angle = 10
crash_recovery_rate = 100
crash_limit_yaw = 200
crash_recovery = OFF
item_rotation = OFF
item_relax = RP
item_relax_type = SETPOINT
item_relax_cutoff = 15
item_windup = 85
item_limit = 400
pidsum_limit = 500
pidsum_limit_yaw = 400
yaw_lowpass_hz = 100
throttle_boost = 5
throttle_boost_cutoff = 15
acro_trainer_angle_limit = 20
acro_trainer_lookahead_ms = 50
acro_trainer_debug_axis = ROLL
acro_trainer_gain = 75
p_pitch = 47
i_pitch = 84
d_pitch = 46
f_pitch = 125

p_roll = 45
i_roll = 80
d_roll = 40
f_roll = 120
p_yaw = 45
i_yaw = 80
d_yaw = 0
f_yaw = 120
angle_p_gain = 50
angle_feedforward = 50
angle_feedforward_smoothing_ms = 80
angle_limit = 60
angle_earth_ref = 100
horizon_level_strength = 75
horizon_limit_sticks = 75
horizon_limit_degrees = 135
horizon_ignore_sticks = OFF
horizon_delay_ms = 500
abs_control_gain = 0
abs_control_limit = 90
abs_control_error_limit = 20
abs_control_cutoff = 11
use_integrated_yaw = OFF
integrated_yaw_relax = 200
d_min_roll = 30
d_min_pitch = 34
d_min_yaw = 0
d_max_gain = 37
d_max_advance = 20
motor_output_limit = 100
auto_profile_cell_count = 0
launch_control_mode = NORMAL
launch_trigger_allow_reset = ON
launch_trigger_throttle_percent = 20
launch_angle_limit = 0
launch_control_gain = 40
thrust_linear = 0
transient_throttle_limit = 0
feedforward_transition = 0
feedforward_averaging = OFF
feedforward_smooth_factor = 25
feedforward_jitter_factor = 7
feedforward_boost = 15
feedforward_max_rate_limit = 90
dyn_idle_min_rpm = 0
dyn_idle_p_gain = 50
dyn_idle_i_gain = 50
dyn_idle_d_gain = 50

dyn_idle_max_increase = 150
dyn_idle_start_increase = 50
level_race_mode = OFF
simplified_pids_mode = RPY
simplified_master_multiplier = 100
simplified_i_gain = 100
simplified_d_gain = 100
simplified_pi_gain = 100
simplified_dmax_gain = 100
simplified_feedforward_gain = 100
simplified_pitch_d_gain = 100
simplified_pitch_pi_gain = 100
simplified_dterm_filter = ON
simplified_dterm_filter_multiplier = 100
simplified_gyro_filter = ON
simplified_gyro_filter_multiplier = 100
tpa_mode = D
tpa_rate = 65
tpa_breakpoint = 1350
tpa_low_rate = 20
tpa_low_breakpoint = 1050
tpa_low_always = OFF
ez_landing_threshold = 25
ez_landing_limit = 15
ez_landing_speed = 50
tlm_inverted = OFF
tlm_halfduplex = ON
hott_alarm_int = 5
pid_in_tlm = OFF
report_cell_voltage = OFF
telemetry_disabled_voltage = OFF
telemetry_disabled_current = OFF
telemetry_disabled_fuel = OFF
telemetry_disabled_mode = OFF
telemetry_disabled_acc_x = OFF
telemetry_disabled_acc_y = OFF
telemetry_disabled_acc_z = OFF
telemetry_disabled_pitch = OFF
telemetry_disabled_roll = OFF
telemetry_disabled_heading = OFF
telemetry_disabled_altitude = OFF
telemetry_disabled_vario = OFF
telemetry_disabled_lat_long = OFF
telemetry_disabled_ground_speed = OFF
telemetry_disabled_distance = OFF
telemetry_disabled_esc_current = ON
telemetry_disabled_esc_voltage = ON
telemetry_disabled_esc_rpm = ON

telemetry_disabled_esc_temperature = ON
telemetry_disabled_temperature = OFF
telemetry_disabled_cap_used = ON
ledstrip_visual_beeper = OFF
ledstrip_visual_beeper_color = WHITE
ledstrip_grb_rgb = GRB
ledstrip_profile = STATUS
ledstrip_race_color = ORANGE
ledstrip_beacon_color = WHITE
ledstrip_beacon_period_ms = 500
ledstrip_beacon_percent = 50
ledstrip_beacon_armed_only = OFF
ledstrip_brightness = 100
ledstrip_rainbow_delta = 0
ledstrip_rainbow_freq = 120
osd_units = METRIC
osd_warn_bitmask = 270335
osd_rssi_alarm = 20
osd_link_quality_alarm = 80
osd_rssi_dbm_alarm = -60
osd_rsnr_alarm = 4
osd_cap_alarm = 2200
osd_alt_alarm = 100
osd_distance_alarm = 0
osd_esc_temp_alarm = 0
osd_esc_rpm_alarm = -1
osd_esc_current_alarm = -1
osd_core_temp_alarm = 70
osd_ah_max_pit = 20
osd_ah_max_rol = 40
osd_ah_invert = OFF
osd_logo_on_ariming = OFF
osd_logo_on_ariming_duration = 5
osd_tim1 = 2560
osd_tim2 = 2561
osd_vbat_pos = 341
osd_rssi_pos = 341
osd_link_quality_pos = 341
osd_link_tx_power_pos = 341
osd_rssi_dbm_pos = 341
osd_rsnr_pos = 341
osd_tim_1_pos = 341
osd_tim_2_pos = 341
osd_remaining_time_estimate_pos = 341
osd_flymode_pos = 341
osd_anti_gravity_pos = 341
osd_g_force_pos = 341
osd_throttle_pos = 341

osd_vtx_channel_pos = 341
osd_crosshairs_pos = 312
osd_ah_sbar_pos = 313
osd_ah_pos = 185
osd_current_pos = 341
osd_mah_drawn_pos = 341
osd_wh_drawn_pos = 341
osd_motor_diag_pos = 341
osd_craft_name_pos = 341
osd_pilot_name_pos = 341
osd_gps_speed_pos = 341
osd_gps_lon_pos = 341
osd_gps_lat_pos = 341
osd_gps_sats_pos = 341
osd_home_dir_pos = 341
osd_home_dist_pos = 341
osd_flight_dist_pos = 341
osd_compass_bar_pos = 341
osd_altitude_pos = 341
osd_pid_roll_pos = 341
osd_pid_pitch_pos = 341
osd_pid_yaw_pos = 341
osd_debug_pos = 341
osd_power_pos = 341
osd_pidrate_profile_pos = 341
osd_warnings_pos = 14772
osd_avg_cell_voltage_pos = 341
osd_pit_ang_pos = 341
osd_rol_ang_pos = 341
osd_battery_usage_pos = 341
osd_disarmed_pos = 341
osd_nheading_pos = 341
osd_up_down_reference_pos = 312
osd_ready_mode_pos = 341
osd_nvario_pos = 341
osd_esc_tmp_pos = 341
osd_esc_rpm_pos = 341
osd_esc_rpm_freq_pos = 341
osd_rtc_date_time_pos = 341
osd_adjustment_range_pos = 341
osd_flip_arrow_pos = 341
osd_core_temp_pos = 341
osd_log_status_pos = 341
osd_stick_overlay_left_pos = 341
osd_stick_overlay_right_pos = 341
osd_stick_overlay_radio_mode = 2
osd_rate_profile_name_pos = 341
osd_pid_profile_name_pos = 341

osd_profile_name_pos = 341
osd_rcchannels_pos = 341
osd_camera_frame_pos = 142
osd_efficiency_pos = 341
osd_total_flights_pos = 341
osd_aux_pos = 341
osd_sys_goggle_voltage_pos = 341
osd_sys_vtx_voltage_pos = 341
osd_sys_bitrate_pos = 341
osd_sys_delay_pos = 341
osd_sys_distance_pos = 341
osd_sys_lq_pos = 341
osd_sys_goggle_dvr_pos = 341
osd_sys_vtx_dvr_pos = 341
osd_sys_warnings_pos = 341
osd_sys_vtx_temp_pos = 341
osd_sys_fan_speed_pos = 341
osd_stat_bitmask = 14124
osd_profile = 1
osd_profile_1_name = -
osd_profile_2_name = -
osd_profile_3_name = -
osd_gps_sats_show_pdop = OFF
osd_displayport_device = MSP
osd_rcchannels = -1,-1,-1,-1
osd_camera_frame_width = 24
osd_camera_frame_height = 11
osd_stat_avg_cell_value = OFF
osd_framerate_hz = 12
osd_menu_background = TRANSPARENT
osd_aux_channel = 1
osd_aux_scale = 200
osd_aux_symbol = 65
osd_canvas_width = 53
osd_canvas_height = 20
osd_craftname_msgs = OFF
system_hse_mhz = 8
task_statistics = ON
debug_mode = NONE
rate_6pos_switch = OFF
cpu_overclock = OFF
pwr_on_arm_grace = 5
enable_stick_ariming = OFF
vtx_band = 0
vtx_channel = 0
vtx_power = 0
vtx_low_power_disarm = OFF
vtx_softserial_alt = OFF

vtx_freq = 0
vtx_pit_mode_freq = 0
vtx_halfduplex = ON
vcd_video_system = HD
vcd_h_offset = 0
vcd_v_offset = 0
max7456_clock = NOMINAL
max7456_spi_bus = 3
max7456_preinit_opu = OFF
displayport_msp_col_adjust = 0
displayport_msp_row_adjust = 0
displayport_msp_fonts = 0,1,2,3
displayport_msp_use_device_blink = OFF
displayport_max7456_col_adjust = 0
displayport_max7456_row_adjust = 0
displayport_max7456_inv = OFF
displayport_max7456_blk = 0
displayport_max7456_wht = 2
esc_sensor_halfduplex = OFF
esc_sensor_current_offset = 0
led_inversion = 0
pinio_config = 1,1,1,1
pinio_box = 255,255,255,255
usb_hid_cdc = OFF
usb_msc_pin_pullup = ON
flash_spi_bus = 3
rcdevice_init_dev_attempts = 6
rcdevice_init_dev_attempt_interval = 1000
rcdevice_protocol_version = 0
rcdevice_feature = 0
gyro_1_bustype = SPI
gyro_1_spibus = 1
gyro_1_i2cBus = 0
gyro_1_i2c_address = 0
gyro_1_sensor_align = CW90
gyro_1_align_roll = 0
gyro_1_align_pitch = 0
gyro_1_align_yaw = 900
gyro_2_bustype = NONE
gyro_2_spibus = 0
gyro_2_i2cBus = 0
gyro_2_i2c_address = 0
gyro_2_sensor_align = DEFAULT
gyro_2_align_roll = 0
gyro_2_align_pitch = 0
gyro_2_align_yaw = 0
i2c1_pullup = OFF
i2c1_clockspeed_khz = 800

i2c2_pullup = OFF
i2c2_clockspeed_khz = 800
i2c3_pullup = OFF
i2c3_clockspeed_khz = 800
mco2_on_pc9 = OFF
scheduler_relax_rx = 25
scheduler_relax_osd = 25
cpu_late_limit_permille = 10
serialmsp_halfduplex = OFF
timezone_offset_minutes = 0
rpm_filter_harmonics = 3
rpm_filter_weights = 100,100,100
rpm_filter_q = 500
rpm_filter_min_hz = 100
rpm_filter_fade_range_hz = 50
rpm_filter_lpf_hz = 150
stats_min_armed_time_s = -1
stats_total_flights = 0
stats_total_time_s = 0
stats_total_dist_m = 0
craft_name = -
pilot_name = -
altitude_source = DEFAULT
altitude_prefer_baro = 100
altitude_lpf = 300
altitude_d_lpf = 100
box_user_1_name = -
box_user_2_name = -
box_user_3_name = -
box_user_4_name = -
#